### BR 1-229B ON KIRKWOOD HIGHWAY OVER WHITE CLAY CREEK

**PROJECT SCOPE/DESCRIPTION:** This bridge project on Kirkwood Highway (SR 2) consists of improvements that will include the rehabilitation of the existing steel beams and bearings; the repair of spalled areas of the pier cap and abutments; the scaling of approach slab cracks; as well as the repair of scour holes around the existing piers. A protective barrier will be constructed on the sidewalk on the eastbound side.

**PROJECT JUSTIFICATION:** This bridge is functionally obsolete and ranks 35<sup>th</sup> on the department's bridge deficiency list (via the bridge management program).

**County:** New Castle

**Municipality:** 

**Funding Program:** Road System – Bridges

Functional Category: Preservation

**Representative District:** 24, 21 **Senatorial District:** 8, 9







# BR 1-229B ON KIRKWOOD HIGHWAY OVER WHITE CLAY CREEK (CONTINUED)

Bridge 1-229B





# BR 1-229B ON KIRKWOOD HIGHWAY OVER WHITE CLAY CREEK (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/03	Expended as of 06/30/03	Committed Unexpended as of 06/30/03	Authorization Available
BR 1-229B on Kirkwood Highway								
Over White Clay Creek		\$ 744.0						
Prior Years	State			\$ 344.0	\$ 344.0	\$ 304.7	\$ 39.3	\$ 0.0
	Federal			\$ 1,187.0	\$ 1,187.0	\$ 1,187.0	\$ 0.0	
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
FY 2003	State		\$ 1,531.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
F1 2003	Federal		φ 1,551.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2005 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007-2009 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 344.0	\$ 344.0			\$ 0.0
	Federal			\$ 1,187.0	\$ 1,187.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 744.0	\$ 1,531.0	\$ 1,531.0	\$ 1,531.0	\$ 1,491.7	\$ 39.3	\$ 0.0

# BR 1-229B ON KIRKWOOD HIGHWAY OVER WHITE CLAY CREEK (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
21-074-04	BR 1-229B on Kirkwood Highway Over White Clay Creek	PE	100% ST	\$ 38.2	\$ 38.2	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	9.0	9.0	0.0	0.0	0.0	0.0	0.0
		С	80% FHWA	1,483.8	1,483.8	0.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 1,531.0	\$ 1,531.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

### BR 1-299 ON RED LION ROAD OVER RED LION CREEK

**PROJECT SCOPE/DESCRIPTION:** Bridge 1-299 on Red Lion Road (SR 71) is located in the Red Lion area. Work to this bridge includes replacement of the top slab of the structure, installation of safety improvement measures, placement of scour protection and increased hydraulic capacity to meet the design for future possible storms (50 year).

**PROJECT JUSTIFICATION:** The bridge is in need of repair to maintain its structural capacity and is currently ranked 155<sup>th</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: New Castle

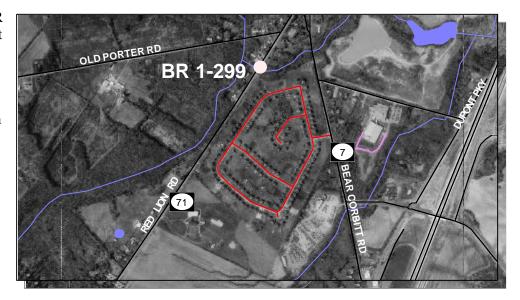
**Municipality:** 

**Funding Program:** Road System – Bridges

**Functional Category:** Preservation

**Representative District:** 15 **Senatorial District:** 12







# BR 1-299 ON RED LION ROAD OVER RED LION CREEK (CONTINUED)

**Bridge 1-299** 





# BR 1-299 ON RED LION ROAD OVER RED LION CREEK (CONTINUED)

Project	Funding	Original	Current	Authorization	Committed	Expended	Committed	Authorization
	Type	Estimate	Estimate		as of 06/30/03	as of 06/30/03	Unexpended	Available
							as of 06/30/03	
BR 1-299 on Red Lion Road								
Over Red Lion Creek		\$ 390.5						
Prior Years	State			\$ 72.0	\$ 72.0	\$ 72.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2003	State		\$ 390.5	\$ 13.5	\$ 0.0	\$ 0.0	\$ 0.0	\$ 13.5
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 0.0				\$ 13.5
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2005 Projected	State			\$ 0.0				\$ 13.5
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 13.5
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007-2009 Projected	State			\$ 0.0				\$ 13.5
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 85.5	\$ 72.0			\$ 13.5
	Federal			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
	Other			φ 0.0	φ 0.0			φ 0.0
Total All Funds		\$ 390.5	\$ 390.5	\$ 85.5	\$ 72.0	\$ 72.0	\$ 0.0	\$ 13.5

# BR 1-299 ON RED LION ROAD OVER RED LION CREEK (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
22-074-06	BR 1-299 on Red Lion Road Over Red Lion Creek	PE	100% ST	\$ 72.0	\$ 72.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	13.5	0.0	13.5	0.0	0.0	0.0	0.0
		С	100% ST	305.0	0.0	0.0	305.0	0.0	0.0	0.0
	Total All Funds			\$ 390.5	\$ 72.0	\$ 13.5	\$ 305.0	\$ 0.0	\$ 0.0	\$ 0.0

### BR 1-307 ON RIVER ROAD OVER GETTY PIPE LINE AND BR 1-311 ON WRANGLE HILL ROAD OVER DRAGON RUN CREEK

**PROJECT SCOPE/DESCRIPTION:** Bridges 1-307 and 1-311 are located in the Delaware City area. Work to Bridge 1-307 on River Road (SR 9) includes replacement of the existing bridge with a prestressed voided slab bridge, safety improvements and minimal approach work. Improvements to Bridge 1-311 on Wrangle Hill Road (SR 72) include replacement of the existing culvert with a reinforced concrete culvert, safety improvements, installation of scour protection and minor roadway approach work.

**PROJECT JUSTIFICATION:** Bridge 1-307 and Bridge 1-311 are closely located and in need of repair to maintain structural capacity. Bridge 1-307 is currently ranked 134<sup>th</sup> and Bridge 1-311 is currently ranked 120<sup>th</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).

**County:** New Castle

**Municipality:** 

**Funding Program:** Road System – Bridges

Functional Category: Preservation

**Representative District:** 9, 15 **Senatorial District:** 12, 14







# BR 1-307 ON RIVER ROAD OVER GETTY PIPE LINE AND BR 1-311 ON WRANGLE HILL ROAD OVER DRAGON RUN CREEK (CONTINUED)

Bridge 1-311





### BR 1-307 ON RIVER ROAD OVER GETTY PIPE LINE AND BR 1-311 ON WRANGLE HILL ROAD OVER DRAGON RUN CREEK (CONTINUED)

Project	Funding	Original	Current	Authorization	Committed	Expended	Committed	Authorization
	Type	Estimate	Estimate		as of 06/30/03	as of 06/30/03	Unexpended as of 06/30/03	Available
							as of 06/30/03	
BR 1-307 on River Road Over Getty								
Pipe Line and BR 1-311on Wrangle								
Hill Road Over Dragon Run Creek		\$ 1,195.6						
Prior Years	State			\$ 71.0	\$ 71.0	\$ 21.3	\$ 49.7	\$ 0.0
	Federal			\$ 101.6	\$ 53.0	\$ 52.9	\$ 0.0	
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2003	State		\$ 1,195.6	\$ 23.0	\$ 0.0	\$ 0.0	\$ 0.0	
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 48.6
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 0.0				\$ 23.0
	Federal			\$ 0.0				\$ 48.6
	Other			\$ 0.0				\$ 0.0
FY 2005 Projected	State			\$ 0.0				\$ 23.0
	Federal			\$ 0.0				\$ 48.6
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 23.0
	Federal			\$ 0.0				\$ 48.6
	Other			\$ 0.0				\$ 0.0
FY 2007-2009 Projected	State			\$ 0.0				\$ 23.0
	Federal			\$ 0.0				\$ 48.6
	Other			\$ 0.0				\$ 0.0
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Total Projected	State			\$ 94.0	\$ 71.0			\$ 23.0
	Federal			\$ 101.6	\$ 53.0			\$ 48.6
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Trade I All Francis	_	\$ 1.105.C	¢ 1 105 ¢	¢ 105.0	¢ 124.0	¢ 74.2	¢ 40.0	<b>\$ 71.</b>
Total All Funds		\$ 1,195.6	\$ 1,195.6	\$ 195.6	\$ 124.0	\$ 74.3	\$ 49.8	\$ 71.6

# BR 1-307 ON RIVER ROAD OVER GETTY PIPE LINE AND BR 1-311 ON WRANGLE HILL ROAD OVER DRAGON RUN CREEK (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
22-071-04	BR 1-307 on River Road Over Getty Pipe Line and BR 1-311 on Wrangle Hill Road Over Dragon Run Creek	PE	100% ST	\$ 127.0	\$ 127.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	68.6	45.6	23.0	0.0	0.0	0.0	0.0
		С	100% ST	1,000.0	0.0	0.0	1,000.0	0.0	0.0	0.0
	Total All Funds			\$ 1,195.6	\$ 172.6	\$ 23.0	\$ 1,000.0	\$ 0.0	\$ 0.0	\$ 0.0

### BR 1-346 ON OLD COOCH'S BRIDGE ROAD OVER TRIBUTARY OF THE UPPER REACHES OF CHRISTINA RIVER

**PROJECT SCOPE/DESCRIPTION:** Bridge 1346 on Old Cooch's Bridge Road (N408) is located in the Cooch's Bridge historic district. The design will be sensitive to the aesthetics required for the area. Work will include replacement of the existing bridge with a simulated arch rigid frame, stream bank stabilization to protect the roadway from eroding, placement of scour protection and minimal roadway approach work.

**PROJECT JUSTIFICATION:** The bridge is in need of repair to maintain its structural capacity and is currently ranked 133<sup>rd</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).

**County:** New Castle

**Municipality:** 

Funding Program: Road System – Bridges

**Functional Category:** Preservation **Representative District:** 24, 27

Senatorial District: 24,









**Bridge 1-346** 

# BR 1-346 ON OLD COOCH'S BRIDGE ROAD OVER TRIBUTARY OF THE UPPER REACHES OF CHRISTINA RIVER (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/03	Expended as of 06/30/03	Committed Unexpended as of 06/30/03	Authorization Available
BR 1-346 on Old Cooch's Bridge Road Over Tributary of the Upper Reaches of Christina River		\$ 598.6						
Prior Years	State			\$ 75.0	\$ 75.0	\$ 48.0	\$ 27.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
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FY 2003	State		\$ 598.6	\$ 25.3	\$ 0.0	\$ 0.0	\$ 0.0	\$ 25.3
	Federal			\$ 0.0 \$ 0.0	\$ 0.0 \$ 0.0	\$ 0.0 \$ 0.0	\$ 0.0 \$ 0.0	\$ 0.0 \$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004 Authorized	State			\$ 0.0				\$ 25.3
1 1 2004 Authorized	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
								,
FY 2005 Projected	State			\$ 0.0				\$ 25.3
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 25.3
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
777 A007 A000 P. J. J. J.	a							* **
FY 2007-2009 Projected	State Federal			\$ 0.0 \$ 0.0				\$ 25.3 \$ 0.0
	Other			\$ 0.0				\$ 0.0
	Other			\$ <b>0.</b> 0				\$ 0.0
Total Projected	State			\$ 100.3	\$ 75.0			\$ 25.3
·	Federal			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 598.6	\$ 598.6	\$ 100.3	\$ 75.0	\$ 48.0	\$ 27.0	\$ 25.3

# BR 1-346 ON OLD COOCH'S BRIDGE ROAD OVER TRIBUTARY OF THE UPPER REACHES OF CHRISTINA RIVER (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007 -2009
	BR 1-346 on Old Cooch's Bridge Road Over Tributary of the Upper Reaches of Christina River	PE	100% ST	\$ 75.0	\$ 75.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	100% ST	25.3	0.0	25.3	0.0	0.0	0.0	0.0
		С	100% ST	498.3	0.0	0.0	498.3	0.0	0.0	0.0
	Total All Funds			\$ 598.6	\$ 75.0	\$ 25.3	\$ 498.3	\$ 0.0	\$ 0.0	\$ 0.0